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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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ALSTON & BIRD LLP  
BANK OF AMERICA PLAZA  
101 SOUTH TRYON STREET, SUITE 4000  
CHARLOTTE, NC 28280-4000

EXAMINER

NUTTER, NATHAN M

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 02/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/766,753

Applicant(s)

RIVETT ET AL.

Examiner

Nathan M. Nutter

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.  
4a) Of the above claim(s) 15-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 07-04, 01-04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

### DETAILED ACTION

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-14, drawn to a polymer blend, classified in class 525, subclasses 191, 210, 232, 240 and 241.
- II. Claims 15-23, drawn to a film, classified in class 428, subclasses vary.
- III. Claims 24-26, drawn to a method of making a film, classified in class 428, subclasses vary.
- IV. Claims 27 and 28, drawn to an article of manufacture, classified in class 428, subclasses vary.

The inventions are distinct, each from the other because:

Inventions of Group II and Group IV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are drawn to articles that differ in modes of operation and have different effects and are used for different effects.

Inventions of Group I and of Groups II and IV are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as a coating composition and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse

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on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Inventions of Group II and of Group III are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the process can be used to make other and materially different films using other compositions.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

During a telephone conversation with Timothy J. Balts on 5 December 2005 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-14. Affirmation of this election must be made by applicant in replying to this Office action. Claims 15-28 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

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Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 2, 10 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1 and 2, and those dependent thereon, the recitation of "boec" has no meaning in the English language. While it is agreed that applicants may be their own lexicographers, the term "boec" is not an English word or term, nor is it an acronym that is known. Acronyms usually appear in capital letters in the English language, such as ATM (Automatic Teller Machine), and are drawn from the first letter or syllables of the successive parts of a compound term, such as radar (radio detecting and ranging). The recitation of "boec" finds no such functioning support in our language. This term is explained at paragraph [0033] of the Specification as being "based on the weight of the elastomeric copolymer." Since it is not an art-recognized term, nor a proper English word, term or acronym, the recitation renders the claim as vague and confusing.

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Likewise, the term "bohm" recited in claims 10 and 11 is not an English word or term, nor is it an acronym that is known. This term is explained at paragraph [0028] of the Specification as being "based on the weight of the high modulus polymer composition." Since it is not an art-recognized term, nor a proper English word, term or acronym, the recitation renders the claim as vague and confusing. As such, claims 10 and 11 are deemed to be vague and confusing.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-14 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a cycloolefinic polymer comprising at least one cyclic olefin mer and at least one of ethylene or propylene at pages 4 and 7 of the Specification, does not reasonably provide enablement for "at least one acyclic mer," as recited and claimed. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims. The Specification provides no support for mers other than the ethylene and propylene, as disclosed at paragraph [0012]. There is no mention of any broad class of monomeric units well-known within the polymer art. Only ethylene and propylene are disclosed. See paragraph [0026]. The Specification discloses broad classes of polymers, e.g. paragraphs [0040], [0042], [0046]-[0048], but never in reference to the use of any monomers employed in their manufacture except ethylene and propylene.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-14 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Khanarian (Polymer Engineering and Science), cited by applicant.

The reference to Khanarian (Polymer Engineering and Science) teaches the manufacture of a polymer blend composition that may comprise a cyclic olefin copolymer, which may comprise norbornene and the acyclic mer, ethylene, as recited in claims 1, 3, 4 and 5, with a styrenic elastomer copolymer that includes a saturated alkene monomer, wherein the styrene content embraces that recited herein for claims 1 and 2. Note the Abstract and Table 2 at page 2592. The Abstract further discloses the styrenic elastomer to embrace styrene-ethylene-butylene-styrene (SEBS) and styrene – butadiene-styrene as recited in instant claims 6, 7, 8 and 9. At page 2592, second column, the final paragraph teaches a styrenic copolymer content of 10% w/w, as recited in instant claims 10 and 11. The recitations of claims 13 and 14 are shown at

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page 2590, second column. As regards the recitations of haze values and peak impact energy in claims 1 and 12, these characteristics are deemed to be inherent. Nothing is recited in the claims which might be construed as different from that disclosed by the reference with regards to the constituents, their respective monomer contents, or compositional limitations which would produce these characteristics. As such, these characteristics are deemed to be inherent, and anticipated by the teachings of the article.

Claims 1-11 are rejected under 35 U.S.C. 102(b) as anticipated by Abe et al (US 5,854,349), newly cited.

The reference to Abe et al (US 5,854,349) teaches the manufacture of a polymer blend composition that may comprise a cyclic olefin copolymer, which may comprise norbornene, tetracyclododecane, bicyclo[2,2,1]-2-heptene, among others, and the acyclic monomers, ethylene or propylene, as recited in claims 1, 3, 4 and 5, with a styrenic elastomer copolymer that includes a saturated alkene monomer, wherein the styrene content embraces that recited herein for claims 1 and 2. Note column 5 (lines 22-35) for the acyclic monomer and column 5 (lines 36 et seq.), in particular column 8 (lines 29-67) for the cyclic olefin monomers. The reference further discloses the styrenic elastomer to embrace styrene-ethylene-butylene-styrene (SEBS), styrene-butadiene block copolymers and styrene-propylene-styrene (SEPS) as recited in instant claims 6, 7, 8 and 9, at column 4 (lines 27-36). At column 2 (lines 37-44), the reference teaches a styrenic copolymer content of 40% by weight, as recited in instant claims 10 and 11. As regards the recitations of haze values and peak impact energy in claims 1 and 12, these



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characteristics are deemed to be inherent. Nothing is recited in the claims which might be construed as being different from that disclosed by the reference with regards to the constituents, their respective monomer contents, or compositional limitations which would produce these characteristics. As such, these characteristics are deemed to be inherent, and anticipated by the teachings of the patent.

Claims 1-7 and 10-14 are rejected under 35 U.S.C. 102(b) as anticipated by Miyamoto et al (EP 0 995 776), cited by applicant.

The reference to Miyamoto et al (EP 0 995 776) teaches the manufacture of a polymer blend composition that may comprise a cyclic olefin copolymer, which may comprise norbornene and the acyclic monomer, ethylene, as recited in claims 1, 3, 4 and 5, with a styrenic elastomer copolymer that includes a saturated alkene monomer, wherein the styrene content embraces that recited herein for claims 1 and 2. Note paragraphs [0012 ] and [0013] and the formulas denoted as I through VIII for the cyclic olefin copolymer. Note paragraph [0018] which teaches the relative compositional limitations of the copolymers, as recited in instant claim 2. At paragraph [0016], the reference discloses the use of the styrenic monomers recited in claim 6 and the copolymer comprising styrene and isobutylene as recited in claim 7. At paragraph [0008], the reference teaches a styrenic copolymer content which clearly embraces that recited in instant claims 10 and 11. The recitations of claims 13 and 14 are shown at paragraph [0012]. As regards the recitations of haze values and peak impact energy in claims 1 and 12, these characteristics are deemed to be inherent. Nothing is recited in the claims which might be construed as different from that disclosed by the reference

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with regards to the constituents, their respective monomer contents, or compositional limitations which would produce these characteristics. As such, these characteristics are deemed to be inherent, and anticipated by the teachings of the reference.

Claims 1-7 and 10-12 are rejected under 35 U.S.C. 102(b) as anticipated by Moriya et al (US 4,918,133), cited by applicant.

The patent to Moriya et al (US 4,918,133) teaches the production of a polymer blend composition that may comprise a cyclic olefin copolymer (denoted as component (A) in the patent) which may comprise norbornene, bicyclo[2,2,1]-2-hept-2-ene, 1-methylbicyclo[2,2,1]-2-hept-2-ene or hexacyclo[6,6,1,1<sup>3,6</sup>,1<sup>10,13</sup>,0<sup>2,7</sup>,0<sup>9,14</sup>]-4-heptadecene, as recited in instant claims 1 and 3, and the acyclic monomer, ethylene, as recited in claims 1, 3, 4 and 5, with a styrenic elastomer copolymer (denoted as component (B) (iv) in the patent) that includes a saturated alkene monomer, including butadiene, of claims 6 and 7, wherein the styrene content embraces that recited herein for claims 1 and 2. Note the Abstract for the broad disclosure. Further, note formulae I-IV for the cyclic olefin monomer at columns 5 and 6, column 6 (line 4) to column 7 (line 36) and the formulae of Tables 1 and 2. Note the paragraph bridging column 17 to column 18 for the elastomer constituent and the styrenic content as recited in claim 2. At column 3 (lines 34-40), the reference teaches a styrenic copolymer content of 1 to 100 parts by weight of (B) based on 100 parts by weight of (A), which embraces the range recited in instant claims 10 and 11. As regards the recitations of haze values and peak impact energy in claims 1 and 12, these characteristics are deemed to be inherent. Nothing is recited in the claims which might be construed as different from that disclosed by the

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reference with regards to the constituents, their respective monomer contents, or compositional limitations which would produce these characteristics. As such, these characteristics are deemed to be inherent, and anticipated by the teachings of the patent.

Claims 1, 3-7 and 10-12 are rejected under 35 U.S.C. 102(e) as anticipated by Zen et al (US 2002/0128392), newly cited.

The patent to Zen et al (US 2002/0128392), discloses the production of a polymer blend composition that may comprise a cyclic olefin copolymer (denoted as component (C) in the patent) which may comprise norbornene or bicyclo[2,2,1]-2-hept-2-ene, as recited in instant claims 1 and 3, and the acyclic monomer, ethylene or propylene, as recited in claims 1, 3, 4 and 5, with a styrenic elastomer copolymer (denoted as component (A) in the patent) that includes a saturated alkene monomer, including butadiene, of claims 6 and 7. Note the Abstract for the broad disclosure. Further, note paragraphs [0031]-[0045] and the many formulae for the cyclic olefin monomer. Note paragraphs [0014]-[0017] for the elastomer constituent.

At paragraph [0010], the reference teaches a styrenic copolymer content of "1 part to 95 parts by weight of component (A),...and 1 part to 95 parts by weight of component (C)," which range embraces the range recited in instant claims 10 and 11. As regards the recitations of haze values and peak impact energy in claims 1 and 12, these characteristics are deemed to be inherent. Nothing is recited in the claims which might be construed as different from that disclosed by the reference with regards to the constituents, their respective monomer contents, or compositional limitations which

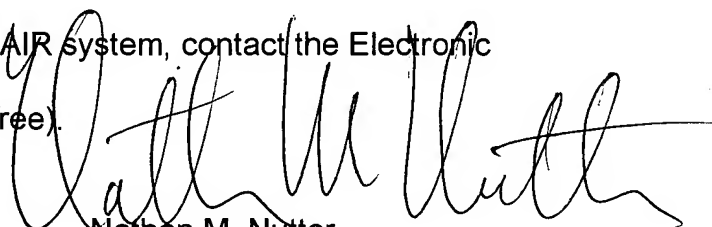
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would produce these characteristics. As such, these characteristics are deemed to be inherent, and anticipated by the teachings of the article.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan M. Nutter whose telephone number is 571-272-1076. The examiner can normally be reached on 9:30 a.m.-6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Nathan M. Nutter  
Primary Examiner  
Art Unit 1711

nmn

10 December 2005